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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,836	05/19/2000	Jean-Claude Engelaere	9189-002	1351

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PENNIE AND EDMONDS
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NEW YORK, NY 100362711

EXAMINER

EGAN, BRIAN P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/07/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/574,836

Applicant(s)

ENGELAERE, JEAN-CLAUDE

Examiner

Brian P. Egan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-26 and 40-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-26 and 40-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 26 August 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on August 26, 2002 have been approved by the Examiner. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5-6, 7-10, 14, 16, 20, 22, 26, 44, 47-49, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeuwsaert (#6,345,726).

Beeuwsaert teach a re-closable packaging (see Abstract) comprising a container (see Fig. 1) having a support layer (Fig. 1, #5), a complexable layer (Fig. 2, #9 and #10), a pressure-sensitive adhesive layer (Fig. 1, #6), and a tearable polyethylene welding layer (Fig. 1, #7; Fig. 2, #s 9-13) wherein the complexable layer, pressure sensitive adhesive layer, and tearable welding layer are laid on the support film (see Fig. 1). The re-closable packaging further comprises a lid (Fig. 1, #3) having a polyethylene welding layer (Fig. 2, #14) and a support layer (Fig. 2, #s 15-18), wherein the tearable welding layer and the welding layer are welded along a seam (See. Fig. 2; Col. 3, lines 55-56). The complexable layer and tearable welding layers have identical

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compositions (Compare Fig. 2, #s 12-13 with Fig. 2, #s 9-10; Col. 3, line 52 to Col. 4, line 53).

Although Beeuwsaert does not explicitly state that the aforementioned layers are laid directly on the support layer by hot-calendering, lamination, or extrusion-lamination, these limitations are given little to no patentable weight. The method of forming the device is not germane to the issue patentability of the device itself absent a demonstration of unexpected results. Beeuwsaert further discloses that the container is either rigid or flexible and is thermoformed (Col. 2, lines 45-46). When the lid is removed from the container, the tearing at the seam takes place within the adhesive layer thereby exposing a portion of the adhesive layer (See Fig. 3, area L).

The applicant contends that Beeuwsaert fails to teach the complexable layer being situated between the pressure sensitive adhesive and support layers. It would have been obvious to one of ordinary skill in the art at the time applicants invention was made, however, to rearrange the layers such that the complexable layer is situated between the PSA and support layers since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Beeuwsaert would not have been prevented from rearranging the layer formation since he teaches that the multilayered structure is used to ensure tightness and impermeability (Col. 4, lines 44-53) and therefore has no restriction on the order of the material layers other than that ensure tightness and impermeability – both of which are accomplishable by arranging the complexable layer between the PSA and the support layer.

4. Claims 2, 4, 11-12, 17-19, 21, 23-25, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeuwsaert (#6,345,726) in view of Spiegel et al. (#3,454,210), the *Material Safety Data Sheet*, the *Encyclopedia of Polymer Science and Technology*, Engelaere (WO 97/19867), and Clerici et al. (#4,791,024).

Beeuwsaert teaches a re-sealable container as detailed above. Beeuwsaert fails, however, to teach a structure comprising a complexable layer, a pressure-sensitive adhesive, and a tearable welding layer being laid on a support via a binding layer. Beeuwsaert also fails to teach that the pressure sensitive adhesive has a lower melting point than the tearable welding layer, that the pressure-sensitive adhesive is a thermoplastic elastomer-based hot-melt adhesive, and that the structure comprising the complexable layer, pressure-sensitive adhesive, and the tearable welding layer is symmetrical and that the adhesive contains two sub-layers – wherein the structure in this form is obtained by collapsing the coextrusion bubble under oxidizing conditions. Note that all methods of forming, i.e. lamination, extrusion lamination, hot-calendering, and collapsing the extrusion bubble, are given little to no patentable weight within the article limitations of the applicant's claims. Also note that the adhesive layer taught by Beeuwsaert is considered to be a binding layer adhesive. Therefore, to meet the limitations of the aforementioned claims, a pressure sensitive adhesive must be found that meets the limitations of the adhesive within the structure 'C' of the applicant's invention.

Spiegel et al. teach a symmetrical multi-layered welding structure that consists of a pressure sensitive adhesive surrounded by material-equivalent polyethylene layers (see Fig. 5), i.e. a tearable welding layer and a complexable layer (Col. 3, lines 13-15). The pressure sensitive adhesive comprises a thermoplastic elastomer-based hot-melt adhesive (Fig. 5; Col. 3, lines 5-9). Spiegel et al. teach that the package comprises at least one tearable film in the multi-layered structure wherein the collapsing of the co-extrusion bubble is done in an oxidizing medium (Col. 3, lines 1-4; Col. 4, lines 48-49). Although Spiegel et al. does not explicitly state whether the adhesive layer has a melting point lower than that of the welding layer, the property

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is inherently met as evidenced by the *Material Safety Data Sheet* (see Pentalyn H MSDS – p.3; SBR MSDS –p.4) and the *Encyclopedia of Polymer Science* (p.6-7 of printout from <http://www.mrw.interscience.wiley.com/epst/articles/pst122/sect2.html>). With reference to the MSDS and the Encyclopedia of Polymer Science, it is shown that the adhesive components of the adhesive in the Spiegel et al. reference, i.e. Pentalyn H and SBR, both have melting points at 100 degrees Celsius wherein polyethylene has a melting point above 100 degrees Celsius, mainly, from 105-128 degrees Celsius.

The Applicant's contentions are noted as to the publication dates of the MSDS and Polymer Science references being after the filing date of the Applicant's invention. The materials referenced in these references were notoriously well known in the art prior to the Applicant's invention, as demonstrated by the disclosure of Spiegel et al., and thus it is not per se improper to reference art that was published after the Applicant's filing date to confirm physical properties of a material that was known in the art prior to the filing date. Even in the absence of the teachings of the MSDS and Polymer Science publications, the Examiner maintains that even if not inherent, it would have been obvious to have modified the melting point of the polyethylene melting point such that it is below the melting point of the welding layer since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Spiegel et al. construct a container in the aforementioned way for the purpose of providing a package that is easily opened while having a positive reclosable feature (Col. 1, lines 64-66) as well as to increase the free surface energy of the polyethylene layers through the use of oxidative influences (Col. 4, lines 48-49). It would have been obvious through routine

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experimentation to one of ordinary skill in the art at the time applicant's invention was made to have used the multilayer welding structure for a re-sealable container for the purpose of providing a package that is easily opened while having a positive reclosable feature as well as to increase the free surface energy of the polyethylene layers through the use of oxidative influences as taught by Spiegel et al.

Clerici et al. teach a dismemberable adhesive junction (fig. 2, #10b and #11b) for the purpose of providing a manually readily openable and reclosable member capable of being jointed with another identical or similar element. Therefore, it would have been obvious through routine experimentation to one of ordinary skill in the art to have modified a multilayered structure with opposing equivalent layers with a 2-layered dismemberable adhesive for the purpose of providing a manually readily openable and reclosable member capable of being jointed with another identical or similar element as taught by Clerici et al.

Engelaere teaches a re-sealable container assembly containing a polyurethane binding layer (Page 15, lines 23-26) that attaches the welding and base layers by lamination (Page 9, lines 23-24), extrusion-lamination (Page 9, lines 18-22), or hot-calendering (Page 9, lines 25-26). The polyurethane adhesive was chosen for the purpose of providing the container with an adhesive with nearly permanent tack properties (Page 9, lines 12-13). Therefore, it would have been obvious through routine experimentation to one of ordinary skill in the art at the time applicant's invention was made to have selected a polyurethane binding layer adhesive for the purpose of providing the container with a nearly permanent tack between layers as taught by Engelaere.

Thus, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have modified Beeuwsaert to include a multilayered welding structure as taught by Spiegel et al. in order to provide a package that is easily opened while having a positive reclosable feature as well as to increase the free surface energy of the polyethylene layers through the use of oxidative influences. It would also have been obvious to have modified Beeuwsaert to have included a 2-layered adhesive in the multilayered welding structure as taught by Clerici et al. in order to provide a manually readily openable and reclosable member capable of being jointed with another identical or similar element, i.e. attachment of the tearable welding layer to the complexable layer. Finally, although Beeuwsaert teaches a binding layer adhesive, he fails to explicitly state the composition of the adhesive. Therefore, it would also have been obvious to modify Beeuwsaert to have include a polyurethane-based binding layer that can be either laminated, extrusion laminated, or hot-calendered as taught by Engelaere in order to provide the container with a nearly permanent tack between layers.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beeuwsaert ('726) in view of Takata et al. (#5,167,339).

Beeuwsaert teaches a re-sealable container as described above. Beeuwsaert fails to teach an adhesive comprising from 5-25% by weight of filler or processing agent within the adhesive.

Takata et al., however, teaches a resealable container that has an adhesive that contains between 0 and 95% filler for the purpose of providing a container with a desirable peel strength as well as to provide an adhesive with high heat resistance (Col. 4, lines 51-64). It would have been obvious through routine experimentation to one of ordinary skill in the art at the time

applicant's invention was made to have modified an adhesive layer within a re-sealable container to include between 0 and 95% filler for the purpose of providing a container with a desirable peel strength and high heat resistance as taught by Takata et al.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have modified Beeuwsaert to include filler within the adhesive layer of the re-sealable container as taught by Takata et al. in order to provide a container with a desirable peel strength and high heat resistance.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beeuwsaert ('726) in view of Jones et al. (#5,882,749).

Although Beeuwsaert teaches polyethylene-based weldable layers, he fails to explicitly teach the use of metallocene polyethylene.

Jones et al., however, teach the use of polyethylene metallocene in the outer weldable layers of a re-closable package for the purpose of producing a heat sealable layer (Col. 6, lines 16-20). It would have been obvious through routine experimentation to one of ordinary skill in the art at the time applicant's invention was made to have used metallocene polyethylene in a resealable container structure for the purpose of producing a heat sealable layer as taught by Jones et al.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have modified Beeuwsaert to specifically use metallocene polyethylene as taught by Jones et al. in order to produce a heat sealable layer.

7. Claims 40-43, 45-46, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeuwsaert (#6,345,726) in view of Toshima (#6,106,153).

Beeuwsaert teach a reclosable container as detailed above. Beeuwsaert fail to teach a packaging that is opened by separating the cover and the container in the welding region to form a first and second pressure-sensitive adhesive sub-layer from the pressure-sensitive adhesive layer such that the cover of the opened packaging comprises the first PSA sub-layer and the container of the opened packaging comprises the second PSA sub-layer.

Toshima, however, teach a reclosable package comprising a welded seam wherein the package is opened by separating the container in the welding region to form first and second PSA adhesive sublayers (see Abstract; Fig. 4(b); Col. 4, lines 27-43). Toshima teach the use of a reclosable package comprising two adhesive sublayers upon opening for the purpose of providing an improved resealable property to the package which allows the stored contents to be stored for a long period of time (Col. 4, lines 39-43). It would have been obvious through routine experimentation to one of ordinary skill in the art at the time Applicant's invention was made to have modified a welding layer of a reclosable package such that the adhesive forms two sublayers upon opening for the purpose of providing an improved resealable property to the package which allows the stored contents to be stored for a long period of time as taught by Toshima.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Beeuwsaert by providing an adhesive that forms two sublayers upon opening of the reclosable package as taught by Toshima in order to provide an improved resealable property to the package which allows the stored contents to be stored for a long period of time. Further note that Toshima teach the use of a complexible layer next to the welding layer to facilitate the separation of the reclosable package (Col. 4, lines 26-

38) which provides further motivation for the rearrangement of layers in the Beewsaert container.

Response to Remarks

8. Applicant's arguments with respect to claims 1, 3-26, and 40-52 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner notes that the 35 U.S.C. 112, second paragraph rejections from the previous office action have been withdrawn pursuant to the Applicant's remarks and amended claims. It should be further noted, however, that even though the use of method limitations is not per se improper, the method of forming the article is not germane to the issue of patentability of the device itself. Therefore, the Examiner maintains the application of little to no patentable weight to the method limitations as noted in the previous office action.

Pursuant to the Applicant's remarks, the Examiner agrees with the analysis of Newman et al. insofar as Newman et al. fails to teach a reclosable package with the Applicant's claimed limitations. The Examiner has therefore withdrawn the 35 U.S.C. 103(a) rejection over Newman et al.

Finally, with regards to the Applicant's contentions that Beewsaert fail to teach a complexible layer as claimed by the Applicants, the Examiner respectfully disagrees. Whether or not the complexible layer acts in unison with the surrounding layers is not relevant to the claimed limitation. The limitations on which the Applicant relies are not stated in the claims. It

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is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices, Inc.*, 7 USPQ 2d 1064.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 703-305-3144. The examiner can normally be reached on M-F, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


BPE
June 29, 2003


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

6/30/03